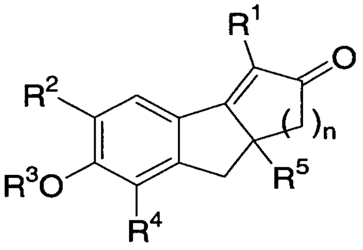
WHAT IS CLAIMED IS:

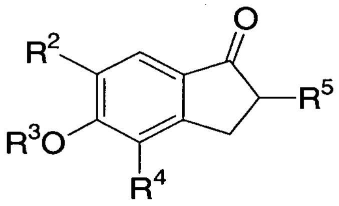
1. A process for making compounds of formula I:



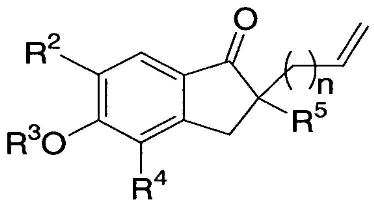
I

comprising the steps of:

a. alkylating an indanone of formula II to yield an intermediate of formula III;

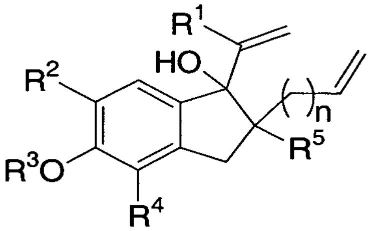


II



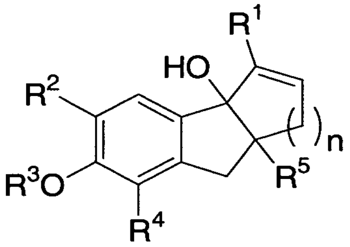
III

b. adding a nucleophile to the intermediate of formula III to yield a diene of formula IV;



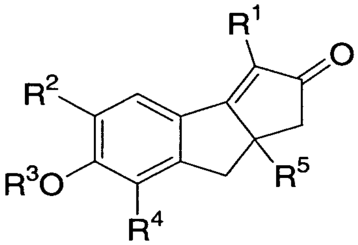
IV

c. cyclizing the diene of formula IV via a ring closing olefin metathesis reaction to yield an allylic alcohol of formula V;



V

d. rearranging the compound of formula V via an allylic oxidative rearrangement to yield an enone of formula VI;



VI

e. optionally deprotecting R^3;

wherein R^1 is hydrogen, C_{1-10} alkyl, C_{3-7} cycloalkyl, (cycloalkyl)alkyl, aryl, heteroaryl, arylalkyl, (heteroaryl)alkyl or $SiR^aR^bR^c$ wherein said alkyl, cycloalkyl, aryl and heteroaryl groups are optionally substituted with 1, 2 or 3 groups selected from fluoro, chloro, bromo, iodo, OR^d, NR^eR^f, $O(C{=}O)NR^eR^f$, $NR^e(C{=}O)R^f$, $NR^e(C{=}O)OR^f$, SR^e, $S(O)R^e$, SO_2R^e, $SO_2NR^eR^f$, LR^g or MLR^g;

R^2 is hydrogen, fluoro, chloro, bromo, iodo, methyl or CF_3;

R^3 is hydrogen, C_{1-10} alkyl, benzyl or a removable hydroxyl protecting group;

R^4 is hydrogen, fluoro, chloro, bromo, iodo, methyl or CF_3;

R^5 is hydrogen, C_{1-10} alkyl, C_{2-10} alkenyl, C_{2-10} alkynyl, C_{3-6} cycloalkyl, (cycloalkyl)alkyl, aryl, heteroaryl, arylalkyl or (hetereoaryl)alkyl wherein said alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, aryl, heteroaryl, arylalkyl and (heteroaryl)alkyl groups are optionally substituted with bromo, iodo, OR^d, SR^e, 1-3 C_{1-3}alkyl, 1-3 chloro or 1-5 fluoro;

R^a, R^b and R^c are independently selected from C_{1-8}alkyl, $O(C_{1-8}$alkyl) and phenyl;

R^d is a removable hydroxyl protecting group, C_{1-10}alkyl, benzyl or phenyl, wherein said phenyl group is optionally substituted with 1-3 substituents independently selected from C_{1-4}alkyl, O(C_{1-4}alkyl), NH(C_{1-4}alkyl), N(C_{1-4}alkyl)$_2$, or halo;

R^e is C_{1-10}alkyl or phenyl, wherein said alkyl group is optionally substituted with a group selected from O(C_{1-4}alkyl), NH(C_{1-4}alkyl), N(C_{1-4}alkyl)$_2$, phenyl, or 1-5 fluoro, and wherein said phenyl group is optionally substituted with 1-3 substituents independently selected from C_{1-4}alkyl, O(C_{1-4}alkyl), NH(C_{1-4}alkyl), N(C_{1-4}alkyl)$_2$ or halo;

R^f is C_{1-10}alkyl or phenyl, wherein said phenyl group is substituted with 1-3 substituents independently selected from C_{1-4}alkyl, O(C_{1-4}alkyl), NH(C_{1-4}alkyl), N(C_{1-4}alkyl)$_2$ or halo;

or R^e and R^f, whether or not on the same atom, can be taken together with any attached and intervening atoms to form a 4-7 membered ring;

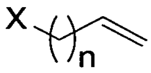
R^g is NR^eR^f, OR^d, $NR^e(C{=}O)R^f$, $CONR^eR^f$, $SO_2NR^eR^f$ or a 4-9 membered mono- or bicyclic N-heterocycloalkyl ring that can be optionally substituted with 1-3 C_{1-3} alkyl and can be optionally interrupted by O, S or NR^e;

L is CH_2, CR^eR^f, or C_{2-6} alkylene, wherein said alkylene linker can be optionally interrupted by O, S or NR^e;

M is O, S, NR^e, $NR^e(C{=}O)$ or $(C{=}O)NR^e$;

and n is one, two or three.

2. The process of Claim 1 wherein the alkylation is performed with an alkylating agent of formula VII in the presence of a base,



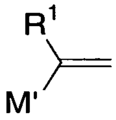
VII

wherein X is Br, Cl, I, OMs, OTs or OTf.

3. The process of Claim 2 wherein the base is sodium hydride, potassium hydride, lithium diisopropylamide, lithium bis(trimethylsilyl)amide or sodium bis(trimethylsilyl)amide.

4. The process of Claim 2 wherein the base is sodium hydroxide or potassium hydroxide, and wherein said base is in the presence of a chiral phase transfer catalyst selected from N-benzylcinchoninium bromide, N-(p-trifluorobenzyl)cinchoninium bromide, N-(3,4-dichlorobenzyl)cinchoninium chloride, N-benzylcinchonidinium bromide, N-(p-trifluorobenzyl)cinchonidinium bromide or N-(3,4-dichlorobenzyl)cinchonidinium chloride.

5. The process of Claim 1 wherein the nucleophilic addition is performed with an alkenyl metal species of formula VIII,

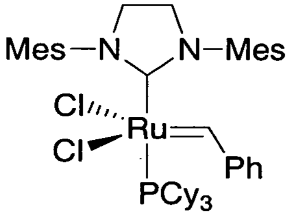


VIII

wherein M' is MgBr, Li or Ce.

6. The process of Claim 1 wherein the ring closing olefin metathesis reaction is in the presence of a transition metal catalyst.

7. The process of Claim 6 wherein the transition metal catalyst is



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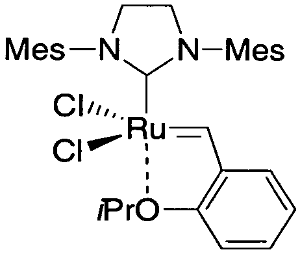

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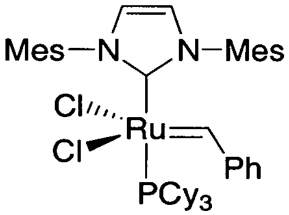

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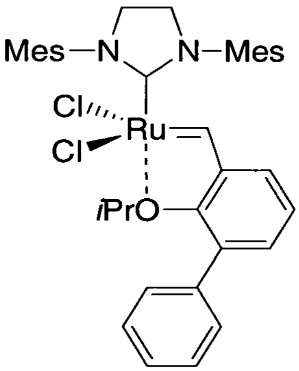

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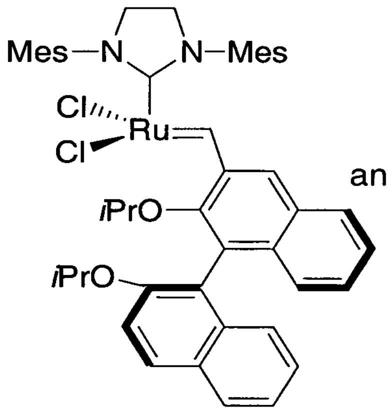
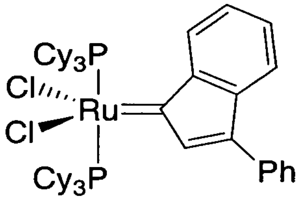


and



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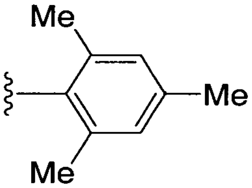
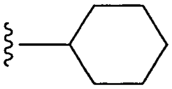
wherein Mes =



and Cy =



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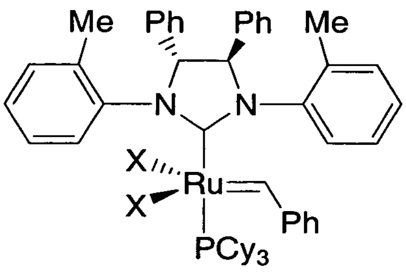
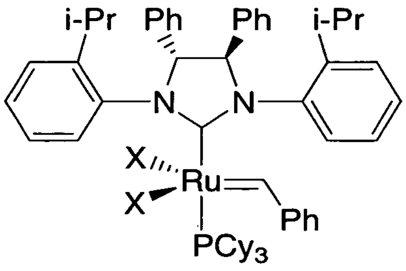
8. The process of Claim 1 wherein the ring closing olefin metathesis reaction is in the presence of a chiral metathesis catalyst, wherein said chiral metathesis catalyst is



X = Cl, Br or I

or



X = Cl, Br or I

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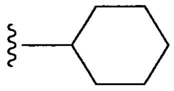
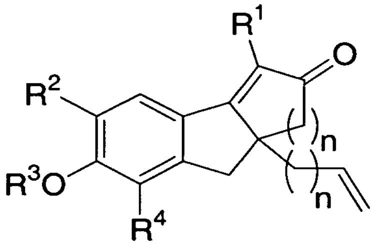
wherein Cy =  .

9. The process of Claim 6 wherein the ring closing olefin metathesis reaction is in the presence of ethylene.

10. The process of Claim 1 wherein the allylic oxidative rearrangement is performed with a chromium (IV) oxidant.

11. The process of Claim 10 wherein the chromium (IV) oxidant is pyridinium chlorochromate, pyridinium dichromate, chromium trioxide or chromium trioxide-pyridine complex.

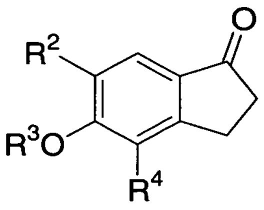
12. A process for making compounds of formula IA:



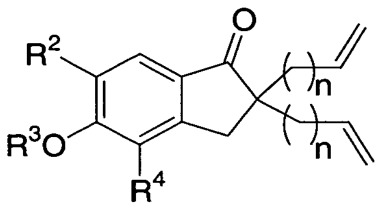
IA

comprising the steps of:

a. alkylating an indanone of formula IIA to yield an intermediate of formula IIIA;

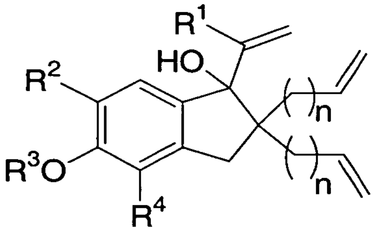


IIA



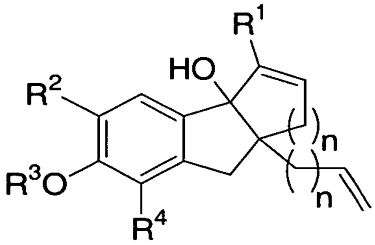
IIIA

b. adding a nucleophile to the intermediate of formula IIIA to yield a diene of formula IVA;



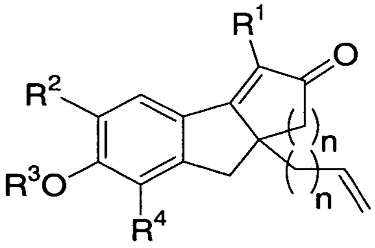
IVA

c. cyclizing the compound of formula IVA via a ring closing olefin metathesis reaction to yield an allylic alcohol of formula VA;



VA

d. rearranging the compound of formula VA via an allylic oxidative rearrangement to yield an enone of formula VIA



VIA

e. optionally deprotecting R^3;

wherein R^1 is hydrogen, C_{1-10} alkyl, C_{3-7} cycloalkyl, (cycloalkyl)alkyl, aryl, heteroaryl, arylalkyl, (heteroaryl)alkyl or $SiR^aR^bR^c$ wherein said alkyl, cycloalkyl, aryl and heteroaryl groups are optionally substituted with 1, 2 or 3 groups selected from fluoro, chloro, bromo, iodo, OR^d, NR^eR^f, $O(C{=}O)NR^eR^f$, $NR^e(C{=}O)R^f$, $NR^e(C{=}O)OR^f$, SR^e, $S(O)R^e$, SO_2R^e, $SO_2NR^eR^f$, LR^g or MLR^g;

R^2 is hydrogen, fluoro, chloro, bromo, iodo, methyl or CF_3;

R^3 is hydrogen, C_{1-10} alkyl, benzyl or a removable hydroxyl protecting group;

R^4 is hydrogen, fluoro, chloro, bromo, iodo, methyl or CF_3;

R^a, R^b and R^c are independently selected from C_{1-8}alkyl, $O(C_{1-8}$alkyl) and phenyl;

R^d is a removable hydroxyl protecting group, C_{1-10}alkyl, benzyl or phenyl, wherein said phenyl group is optionally substituted with 1-3 substituents independently selected from C_{1-4}alkyl, $O(C_{1-4}$alkyl), $NH(C_{1-4}$alkyl), $N(C_{1-4}alkyl)_2$ or halo;

R^e is C_{1-10}alkyl or phenyl, wherein said alkyl group is optionally substituted with a group selected from $O(C_{1-4}$alkyl), $NH(C_{1-4}$alkyl), $N(C_{1-4}alkyl)_2$, phenyl, or 1-5 fluoro, and wherein said phenyl group is optionally substituted with 1-3 substituents independently selected from C_{1-4}alkyl, $O(C_{1-4}$alkyl), $NH(C_{1-4}$alkyl), $N(C_{1-4}alkyl)_2$ or halo;

R^f is C_{1-10}alkyl or phenyl, wherein said phenyl group is optionally substituted with 1-3 substituents independently selected from C_{1-4}alkyl, $O(C_{1-4}$alkyl), $NH(C_{1-4}$alkyl), $N(C_{1-4}alkyl)_2$ or halo;

or R^e and R^f, whether or not on the same atom, can be taken together with any attached and intervening atoms to form a 4-7 membered ring;

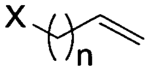
R^g is NR^eR^f, OR^d, $NR^e(C{=}O)R^f$, $CONR^eR^f$, $SO_2NR^eR^f$ or a 4-9 membered mono- or bicyclic N-heterocycloalkyl ring that is optonally substituted with 1-3 C_{1-3} alkyl and can be optionally interrupted by O, S or NR^e;

L is CH_2, CR^eR^f, or C_{2-6} alkylene, wherein said alkylene linker can be optionally interrupted by O, S or NR^e;

M is O, S, NR^e, $NR^e(C{=}O)$ or $(C{=}O)NR^e$;

and n is one, two or three.

13. The process of Claim 12 wherein the alkylation is performed with an alkylating agent of formula VII in the presence of a base,

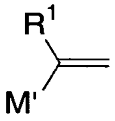


VII

wherein X is Br, Cl, I, OMs, OTs or OTf.

14. The process of Claim 13 wherein the base is sodium hydride, potassium hydride, lithium diisopropylamide, lithium bis(trimethylsilyl)amide or sodium bis(trimethylsilyl)amide.

15. The process of Claim 12 wherein the nucleophilic addition is performed with an alkenyl metal species of formula VIII,

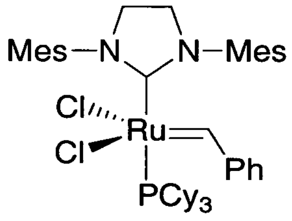


VIII

wherein M' is MgBr, Li or Ce.

16. The process of Claim 12 wherein the ring closing olefin metathesis reaction is in the presence of a transition metal catalyst.

17. The process of Claim 16 wherein the transition metal catalyst is



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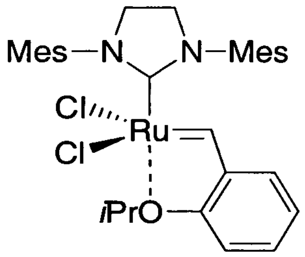

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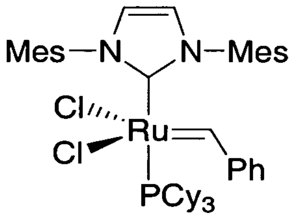

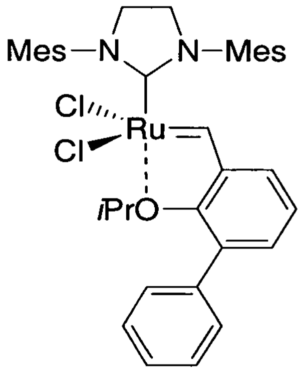

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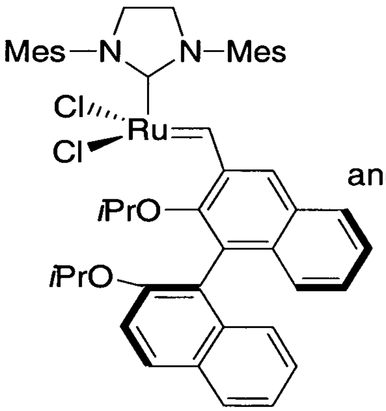
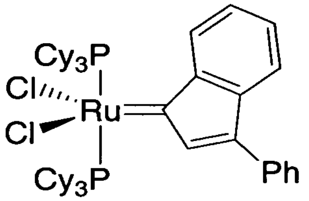


and



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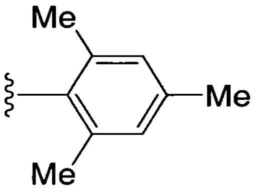
wherein Mes =



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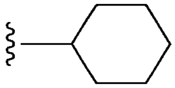

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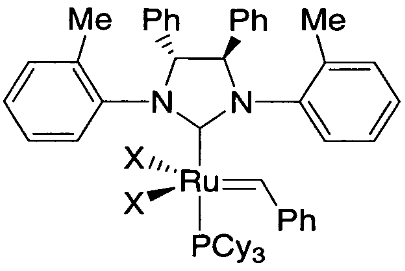
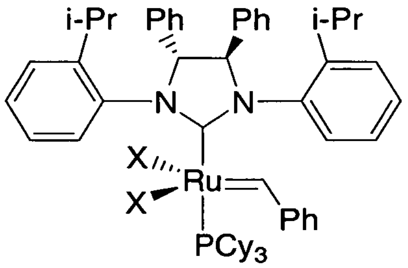
18. The process of Claim 16 wherein the ring closing olefin metathesis reaction is in the presence of ethylene.

19. The process of Claim 12 wherein the ring closing olefin metathesis reaction is in the presence of a chiral metathesis catalyst, wherein said chiral metathesis catalyst is



X = Cl, Br or I

or



X = Cl, Br or I

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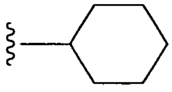
wherein Cy = 

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20. The process of Claim 12 wherein the allylic oxidative rearrangement is performed with a chromium (IV) oxidant.

21. The process of Claim 20 wherein the chromium (IV) oxidant is pyridinium chlorochromate, pyridinium dichromate, chromium trioxide or chromium trioxide-pyridine complex.